

What is claimed is:

1. A plate cooler for fluids, comprising:
 - a bottom plate;
 - 5 a cover plate;
 - a plurality of pairs of spaced plates provided with superposed apertures; side plates and end plates secured at marginal sections of the spaced paired plates to form fluid channels;
 - 10 lateral plates of predetermined height positioned between adjacent pairs of spaced plates and provided with openings aligned with the apertures; and cooling fins of a height substantially identical to the predetermined height disposed between adjacent pairs of spaced paired plates and laterally of the lateral plates.
- 15 2. The plate cooler of claim 1, wherein the spaced paired plates are positioned substantially parallel to each other.
3. The plate cooler of claim 2, wherein the pairs of spaced plates are positioned substantially parallel to each other.
- 20 4. The plate cooler of claim 3, wherein the cover plate, the bottom plate and the pairs of spaced plates are positioned in parallel to each other.
6. The plate cooler of claim 1, wherein the cover plate, the bottom plate, the pairs of spaced plates and the lateral plates are made of one of aluminum and an aluminum alloy.
- 25 7. The plate cooler of claim 6, wherein the cover plate, the bottom plate, the pairs of spaced plates and the lateral plates are vacuum welded together.

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